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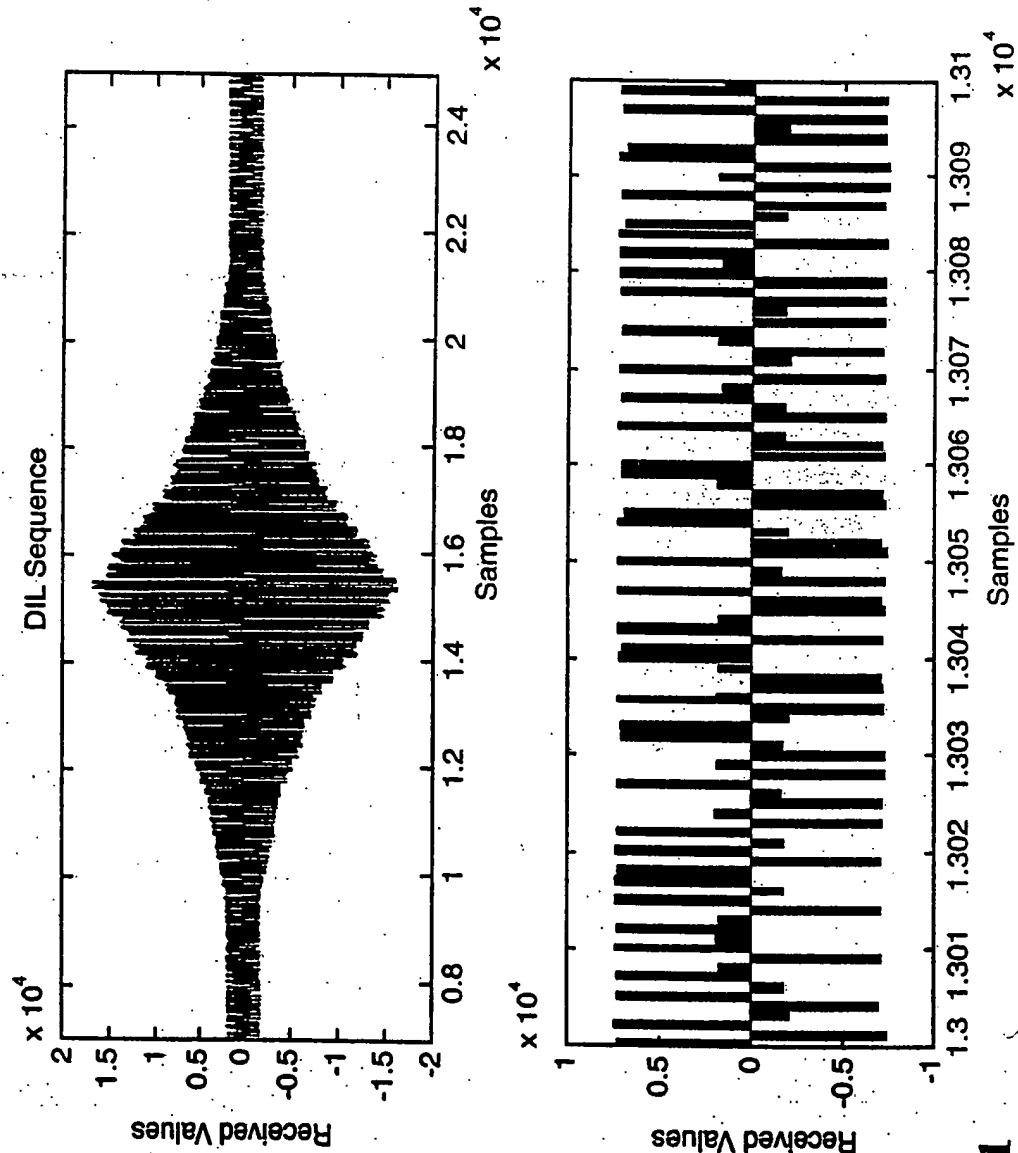


Figure 1

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| Frame | Sign and Training Pattern | | | | | |
|-------|---------------------------|--------|--------|--------|--------|--------|
| | Slot 1 | Slot 2 | Slot 3 | Slot 4 | Slot 5 | Slot 6 |
| 1 | +R | -T | -R | +T | -R | -T |
| 2 | +T | +R | -T | +R | +T | -R |
| 3 | +R | +T | -R | +T | -T | -R |
| 4 | -T | +T | +R | +T | -T | +T |
| 5 | +T | -R | -T | +T | -T | +R |
| 6 | -T | +T | +T | -T | -R | -T |
| 7 | +T | -T | +T | +R | +T | -T |
| 8 | -R | -T | +T | -T | +T | -T |
| 9 | +T | +R | +T | -T | +R | -T |
| 10 | +R | -T | +T | +R | -T | -R |
| 11 | -T | +T | -T | -T | +T | +T |
| 12 | +T | -R | -T | +T | +R | +T |
| 13 | -R | -T | +T | -R | -T | +T |
| 14 | -T | +T | -R | +T | -T | +R |
| 15 | -T | +T | +R | -T | +R | +T |
| 16 | -T | -R | +T | -R | -T | +R |
| 17 | -T | -T | +R | +T | +T | -T |
| 18 | +T | +R | -T | -T | +T | -T |
| 19 | -R | +T | -T | -T | -R | +T |
| 20 | +T | -T | -T | -R | +T | +T |

The "T" in the table represents a training amplitude.
The "R" in the table represents a reference amplitude.
The "+" or "-" represents the sign of the symbol.

Figure 2

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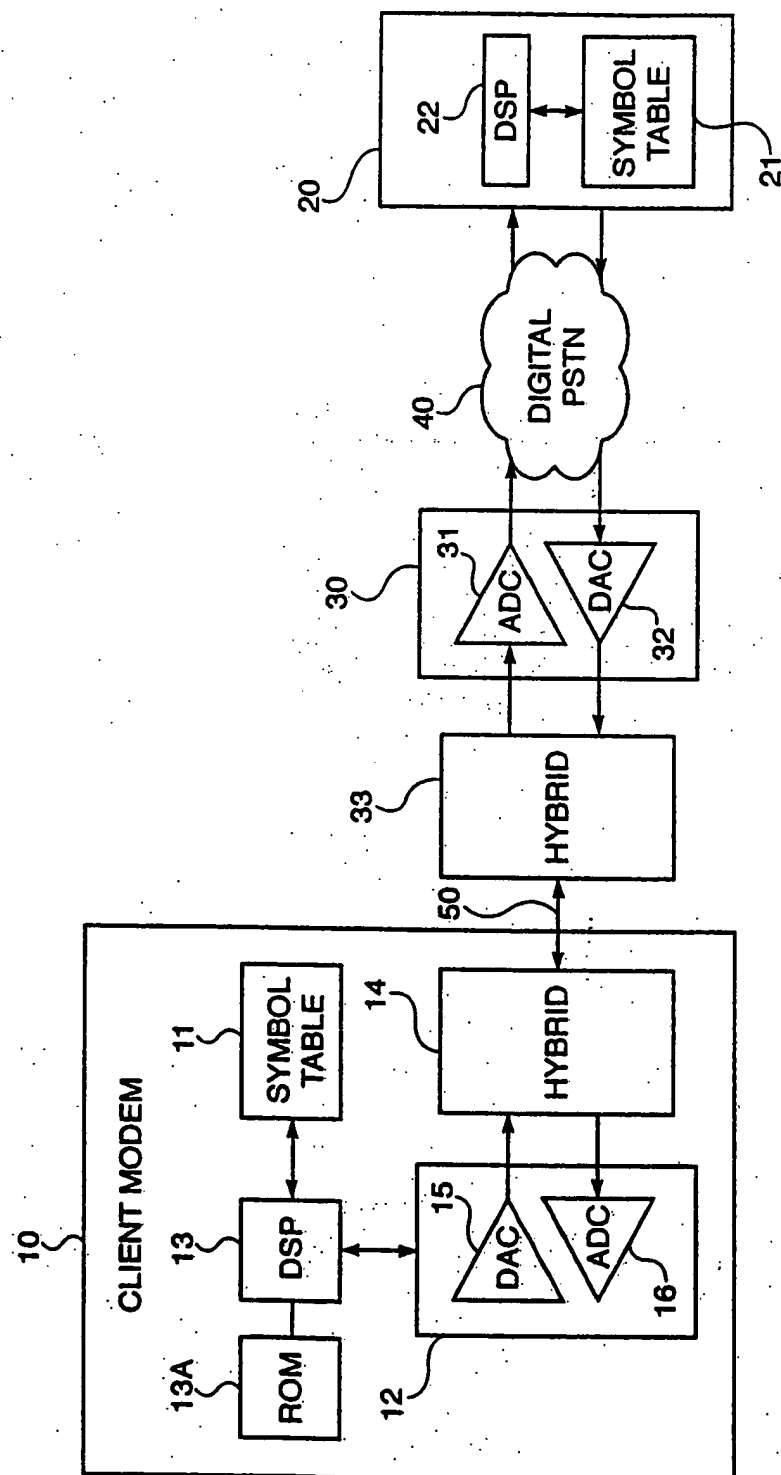


Figure 3

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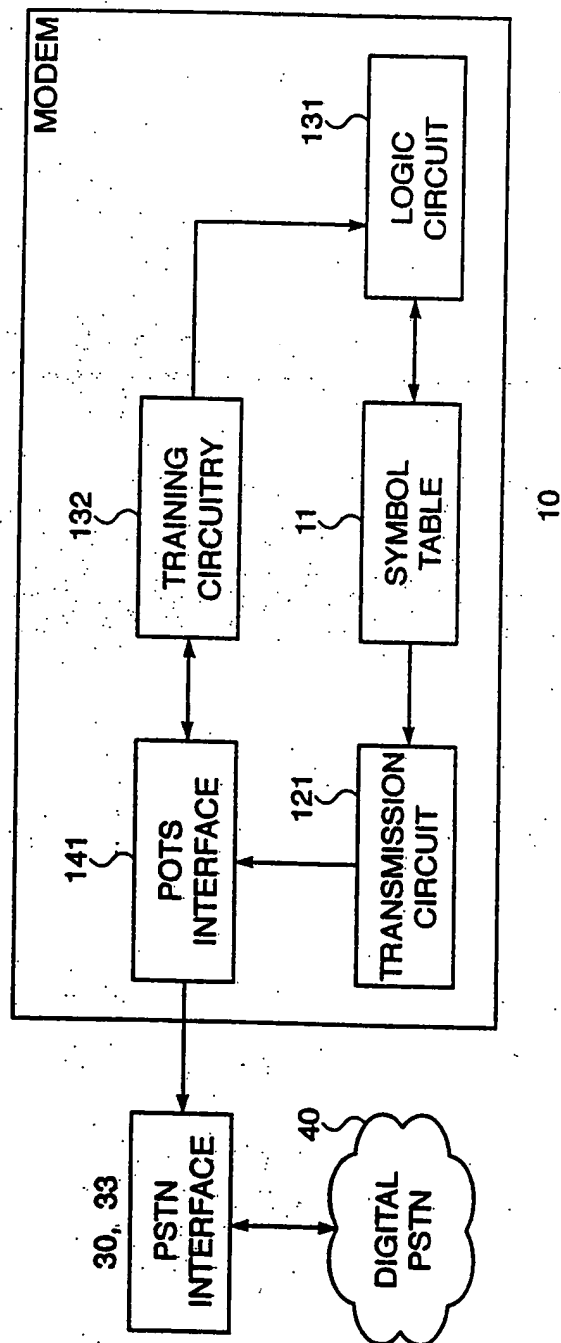


Figure 4

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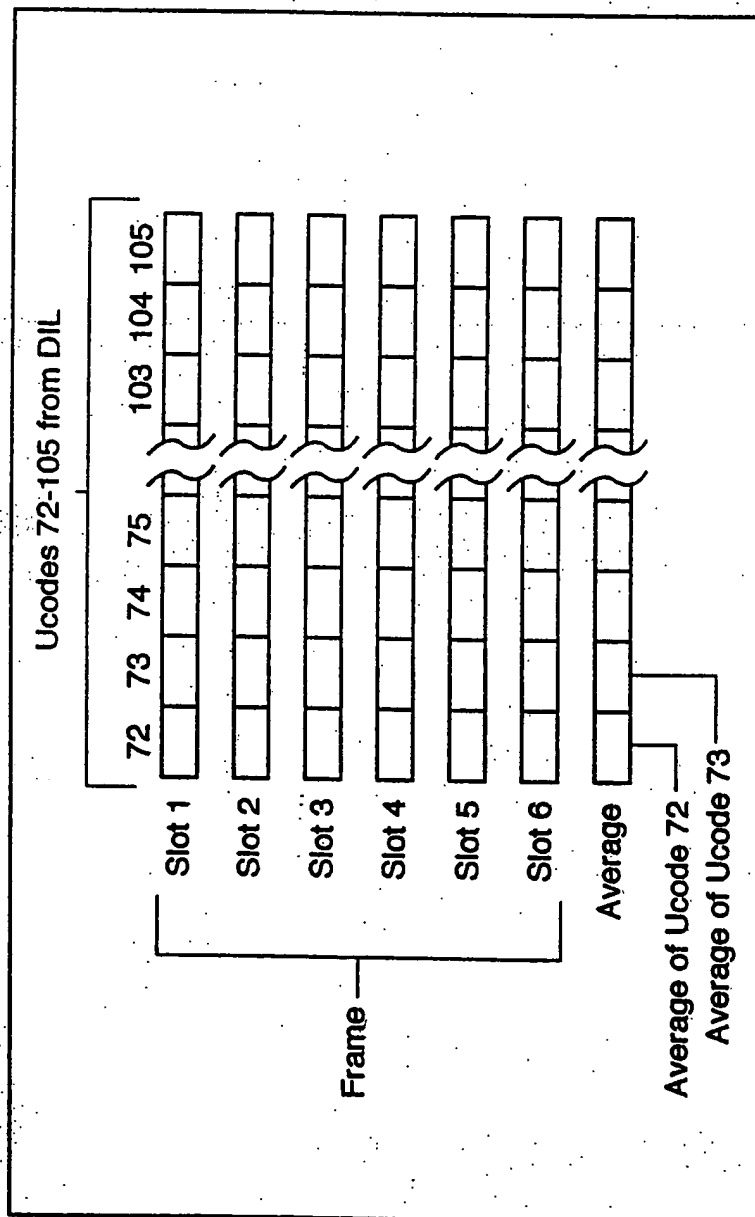


Figure 5

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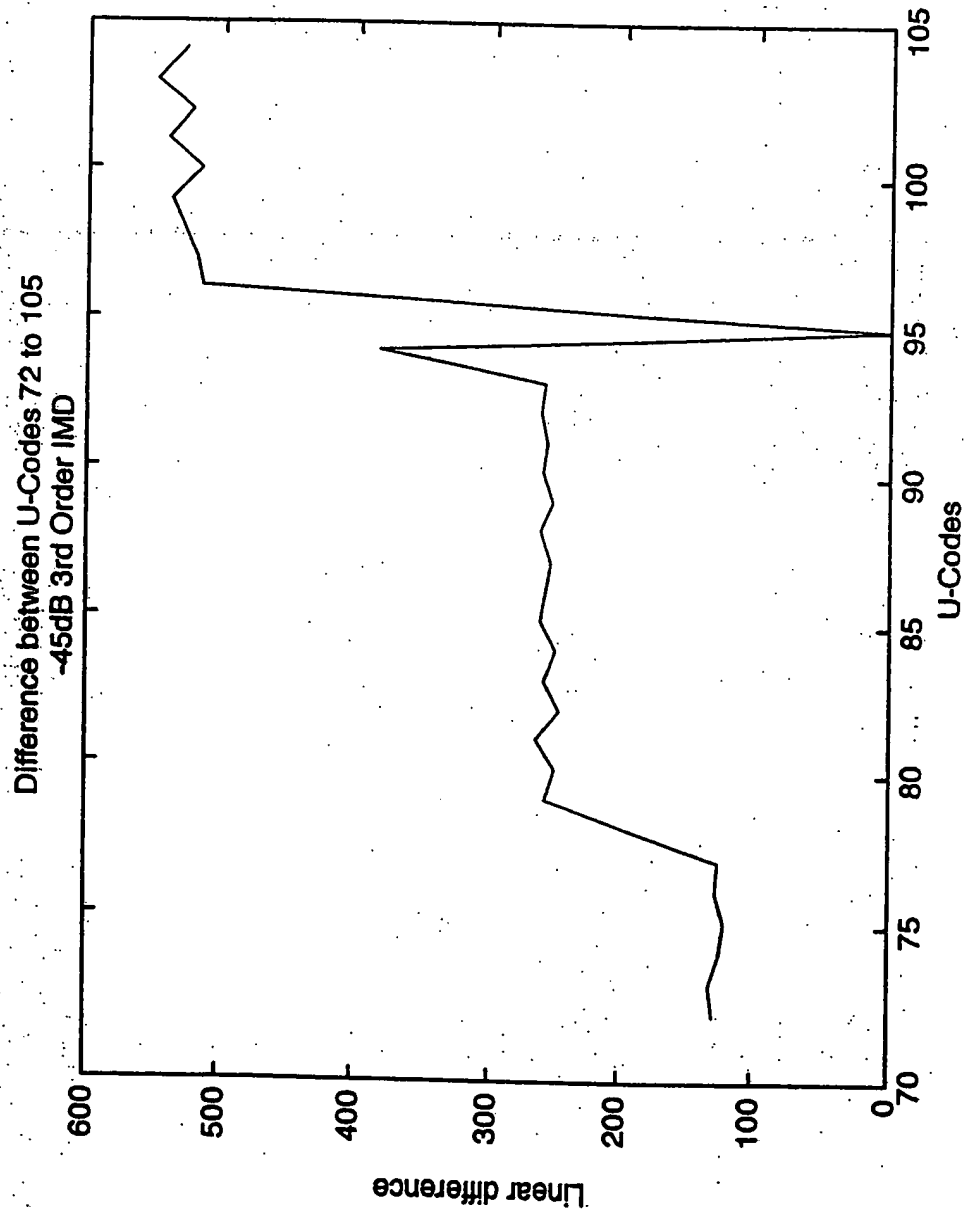


Figure 6

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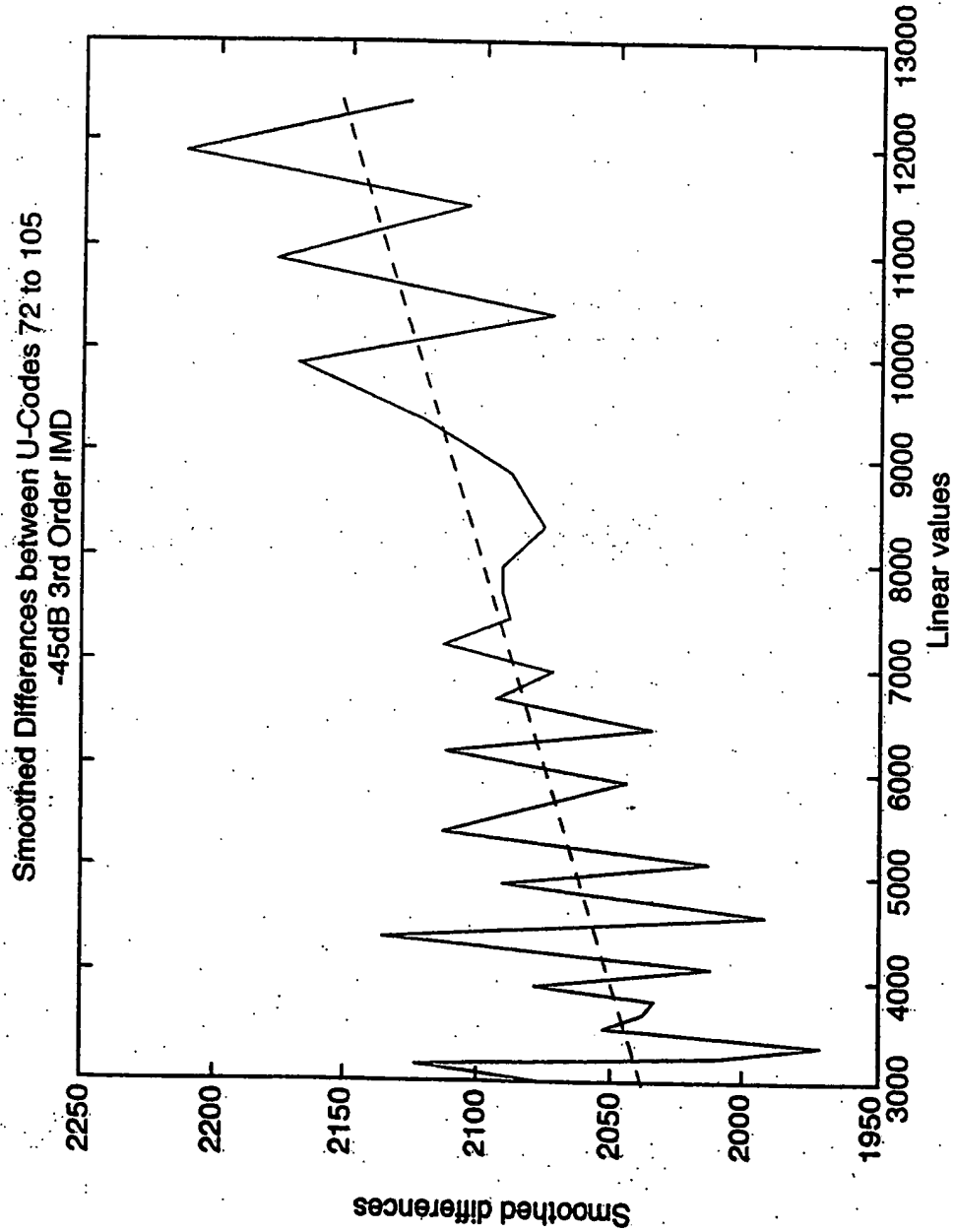


Figure 7

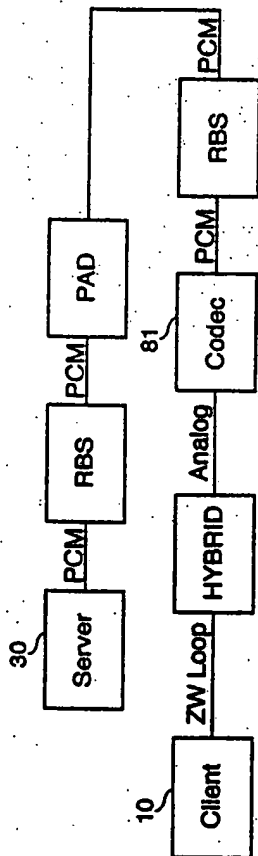


Figure 8

PCM - an 8-bit μ law or A-law digital symbol transmitted over the network. The symbol represents a signal amplitude.
 Linear - the linear value corresponding to the digital symbol (see G.711).
 Analog - the local twisted-pair from the central office to the modem.

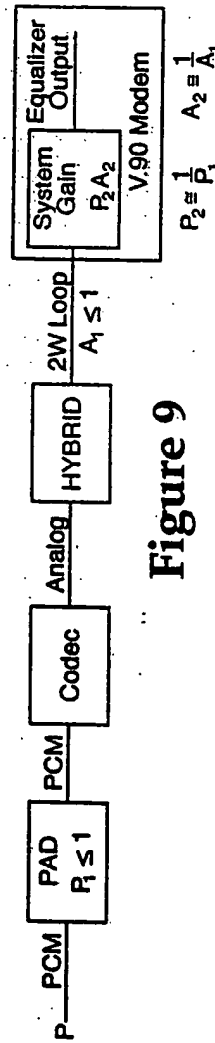


Figure 9

$$\text{Error} = \frac{\sum_{n=\text{Unicode } 72}^{\text{Unicode } 105} |\text{Received Sample}_n \cdot \text{Test Fraction} - \text{SLICED}[\text{Received Sample}_n \cdot \text{Test Fraction}]|}{\text{Test Fraction}}$$

SLICED[x] - results in the G.711 value closest to x.

Ucode# - refers to PCM symbols sent by the server (see V.90 specification)

Received Sample_n - an average received value from the DIL sequence corresponding to Ucode#.

Test Fraction - a value between 1.0 and 0.25 that is adjusted to result in a minimum error

Figure 10

Title: PAD and CODEC Detection

Inventors: Green et al.

Filing Date: Concurrently Herewith

Express Mail Label No.: EL 981992855 US

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Attorney Docket No: 42P12962C

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| U - Code Sent | Avg. Received Value | Using 0.5 as the Text Fraction | Absolute Error | Using 0.5077 as the Text Fraction | Absolute Error |
|---------------|---------------------|--------------------------------|----------------|-----------------------------------|----------------|
| 90 | 6673 | 3337 | 51 | 3388 | 0 |
| 91 | 6925 | 3463 | 53 | 3516 | 0 |
| 92 | 7178 | 3589 | 55 | 3644 | 0 |
| 93 | 7430 | 3715 | 57 | 3772 | 0 |
| 94 | 7682 | 3841 | 59 | 3900 | 0 |
| 95 | 8060 | 4030 | 62 | 4092 | 0 |
| 96 | 8060 | 4030 | 62 | 4092 | 0 |
| 97 | 8564 | 4282 | 66 | 4348 | 0 |
| 98 | 9068 | 4534 | 70 | 4604 | 0 |
| 99 | 9573 | 4787 | 73 | 4860 | 0 |
| 100 | 10077 | 5039 | 77 | 5116 | 0 |
| 101 | 10581 | 5291 | 81 | 5372 | 0 |
| 102 | 11085 | 5543 | 85 | 5628 | 0 |
| 103 | 11590 | 5795 | 89 | 5884 | 0 |
| 104 | 12094 | 6047 | 93 | 6140 | 0 |
| 105 | 12598 | 6299 | 97 | 6396 | 0 |

Figure 11

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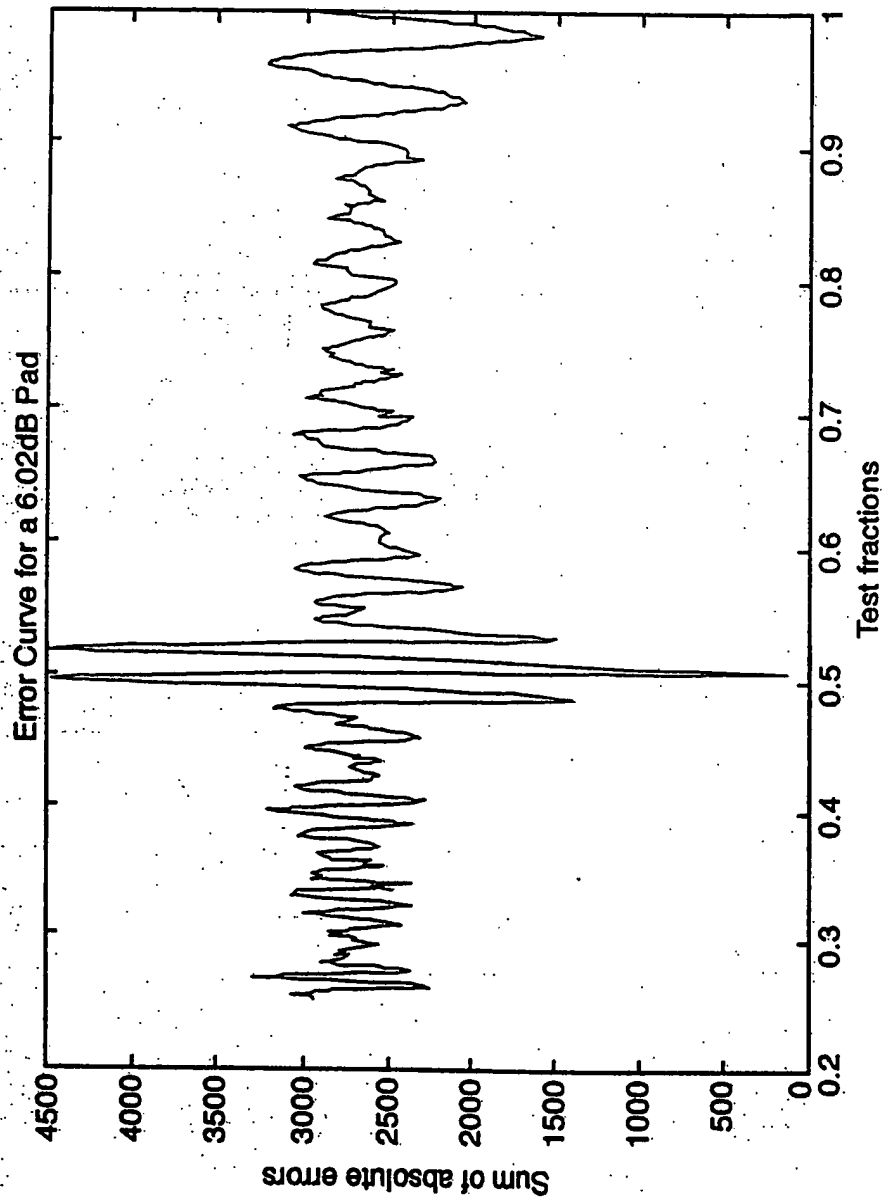


Figure 12

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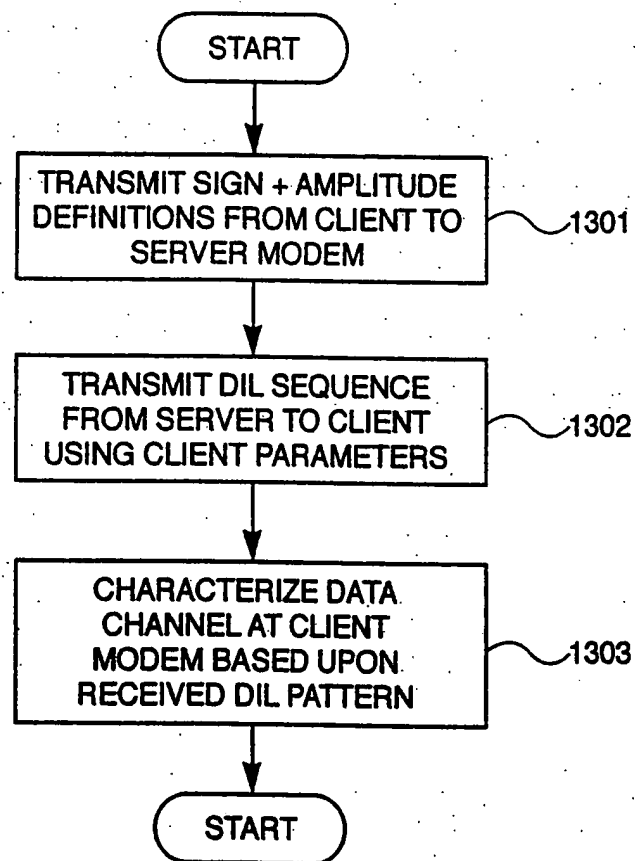


Figure 13